FOMTEC® ARC 1x1 NV

Alcohol Resistant AFFF Foam Concentrate

Fomtec©

ARC 1x1 NV

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Fomtec ARC 1x1 NV is a low viscous alcohol resistant aqueous film forming foam concentrate (AFFF-ARC) consisting of a blend of fluorocarbon-, hydrocarbon surfactants and polymers, various solvents and stabilisers. All Fomtec AFFF-ARC foam concentrates are formulated with 100% C6 Pure fluoro-surfactants and fluoro-polymers. On hydrocarbon fuels, Fomtec ARC 1x1 NV utilises the unique film forming effect to cut off oxygen supply to the fire and the oleophobic properties of the foam enables a stable foam blanket to prevent reignition of the fire. With polar fuels, the special fluoro-polymer forms a stable barrier that suppresses vapours and allows the foam blanket to survive on the water miscible fuel surface.

- Short chain C6 Pure fluoro-chemistry
- Newtonian foam concentrate, easy to pump
- Environmentally documented according to HOCNF
- Approved according to EN 1568 part 3 and part 4
- Suitable for Class A and B fires
- Low and medium expansion foam
- Approval according to IMO 1312 / MED, Mod B & Mod D

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DESCRIPTION

Unlike traditional AFFF-ARC foam types, Fomtec ARC 1x1 NV does not contain any natural polymer and therefore the product is not pseudoplastic. The flow behaviour is similar to that of a regular AFFF, and therefore will not need special proportioning equipment. With the Newtonian property of Fomtec ARC 1x1 NV ordinary pumps can be used and the concentrate can be used in systems with long pipelines.
Fomtec ARC 1x1 NV should be used at a 1% proportioning ratio (1 part concentrate and 99 parts of water) for both hydrocarbon and polar solvent fuels. May be used with all water types. For use on Class A type fires, a proportioning ratio of 0,3% to 1% is recommended depending on application and discharge device.

APPLICATION

Fomtec ARC 1x1 NV is tested and approved according to EN 1568 for use on class B hydrocarbon fuel fires such as oil and diesel as well as polar solvent fires such as IPA and acetone. Can also be used on class A fires such as wood, paper, textiles etc.

Typical applications include high risk installations such as:
- Storage tanks, process areas and loading racks
- Waste and recycling industry
- Fire rescue services

FIRE PERFORMANCE & FOAMING

The fire performance of this product has been tested and documented according to the "International Approvals" stated in this document. The use of the product should follow design guidelines appropriate to the type of system and application.
The foaming properties are depending on equipment used and other variables such as water and ambient temperatures.
Average expansion 9:1, average 25% drainage time 3:30 minutes using UNI 86 test nozzle according to EN 1568-3.

EQUIPMENT

Fomtec ARC 1x1 NV can easily be proportioned at the correct ratio using conventional proportioning equipment. The equipment should be designed to the foam type.
Fomtec ARC 1x1 NV is suitable for use with Type II (gentle application) and Type III (direct application) discharge devices as well as sprinklers according to EN 13565-2. It can be used in low and medium expansion applications with all conventional aspirating and non-aspirating discharge devices.
Fomtec ARC 1x1 NV is also suitable for use in CAF-systems.

COMPATIBILITY

Fomtec ARC 1x1 NV can be used together with foam compatible powders and other expanded foams.
It is suitable for all water types.

TYPICAL DATA	
Appearance	Pale yellow liquid
Specific gravity at 20°C	1,065 ± 0,010 g/ml
Viscosity at 20°C spindle #1, 60 rpm	<40 mPas
pH	6,5 – 8,5
Freezing point	-21˚C
Recommended storage temperature	-20˚C - 55˚C
Suspended sediment (v/v)	< 0,1%

For mixing with other foam concentrates, contact Fomtec for advise and guidance. For material compatibility please refer to Fomtec Technical Advices FTA 20 addressing the topic.

ENVIRONMENTAL

Fomtec ARC 1x1 NV is formulated using raw materials specially selected for their fire performance and their environmental profile. All raw materials are registered in the European REACH-database. Fomtec ARC 1x1 NV is non-toxic, biodegradable and each individual component is fully tested and documented.

Fomtec ARC 1x1 NV formulations contains PFAS using C6 fluorosurfactants and may be used in accordance with legislation valid for the user for the specific derogation. For the latest update on PFAS legislation in EU, check ECHA´s website.

Our filmforming (ARC 1x1 NV) products comply with current EU regulation 2019/ 1021 and PoP´s Stockholm convention and US EPA Stewardship as of the revision date of this document. In case of an analysis with current available analytical methods, the result of PFOA and PFOS will be below the detection level. More details can be found in the Material Safety Datasheet (MSDS).
The disposal of concentrate and premix may include; capture of release / discharge, waste handling should be made in accordance with local regulations. For total destruction/ mineralization of PFAS incineration at 1100°C is recommended. For more detailed information please consult Fomtec Technical Advices FTA 40.

STORAGE / SHELF LIFE

Stored in original unbroken packaging the product will have a long shelf life. Shelf life in excess of 10 years will be found in temperate climates. As with all foam concentrates, shelf life will be dependent on storage temperatures and conditions. For storage recommendations and material compatibility please refer to Fomtec Technical Advices FTA 10 addressing the topic.

INSPECTION/TESTING/ MAINTENANCE

All foam concentrates should be tested annually. Testing should be carried out by an approved laboratory certified to assess

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firefighting foam quality according to relevant standards, such as NFPA 11, EN 13565-2, EN 1568 and IMO MSC.1Circ. 1312. Storage containers should be inspected and reevaluated for the suitability of the storage location regarding temperature fluctuations (temperature should be as stable as possible). Exposure to direct sunlight should be avoided.

PACKAGING

We supply this product in 25 litre or 5 US gallon cans, 200 litre or 55 US gallon drums, and 1000 litre or 265 US gallon IBC containers. Larger bulk supply is available against special request.

INTERNATIONAL APPROVALS

- EN 1568 part 3
  Class IA Fresh water/Class IA Sea water
- EN 1568 part 4
  Acetone: Class IA Fresh water and sea water
  IPA: Class 1C Fresh water and sea water
- Approval according to IMO 1312 / MED, Mod B & Mod D

Volume per piece	Packaging	Part no	Approx. shipping weight*	Dimensions (mm) L x W x H
25 ltr	Can	12-1140-01	28,0 kg	295 x 260 x441
200 ltr	Drum	12-1140-02	222,5 kg	581x 581 x 935
1000 ltr	Container	12-1140-04	1130 kg	1200 x1000 x1150
5 US gal.	Can	12-1140-XX	21,2 kg	295 x 260 x 441
55 US gal.	Drum	12-1140-XX	231,5 kg	581 x 581 x 935
265 US gal.	Container	12-1140-XX	1135 kg	1200 x1000 x1150
Bulk	Special request	12-1140-XX		

** including packaging.*

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